CURRICULUM STRUCTURE

IV Semester Scheme of Studies- Diploma in Architecture Assistantship

Sl. No.	Course Category / Teaching Department	Course Code	Course Name	Hours per week			Total contact hrs /week	Credits	CIE Marks		SEE Marks		Total Marks	Min Marks for Passing (including CIE marks)	Assigned Grade	Grade Point	SGPA and CGPA
				L	T	P			Max	Min	Max	Min					
INTEGRATED COURSES																	Both SGPA & CGPA
1	PC/AR	1441	Building Construction and Drawing-II	3	1	4	8	6	60	24	40	16	100	40			
2	PC/AR	1442	Architectural Drawing-II	3	1	4	8	6	60	24	40	16	100	40			
3	PC/AR	1443	Computer Aided Presentation Technique	3	1	4	8	6	60	24	40	16	100	40			
4	PC/AR	1444	Building Services and Drawing	3	1	4	8	6	60	24	40	16	100	40			
AUDIT COURSE																	
5	AU/AR	1445	Indian Constitution	2	0	0	2	2	50	20	-	-	50	20			
Total				**14**	**4**	**16**	**34**	**26**	**290**	**116**	**160**	**64**	**450**	**180**			

*PC: Programme Core:: AU-Audit Course:: L:Lecture:: T: Tutorial:: P: Practice

Government of Karnataka
Department of Collegiate and Technical Education
JSS Polytechnic for the Differently Abled (Autonomous)

BUILDING CONSTRUCTION AND DRAWING-II

Programme	**Architecture Assistantship**	**Semester**	**IV**
Course Code	**1441**	**Type of Course**	**Programme Core**
Course Name	**Building construction and drawing-II**	**Contact Hours**	**8 hours/week 128 hours/semester**
Teaching Scheme	**L:T:P :: 3:1:4**	**Credits**	**6**
CIE Marks	**60**	**SEE Marks**	**40**

1. **Rationale:** Building construction and drawing-II, mainly focuses on the very crucial phase of construction process where students learn about various components, materials and its application in the process of construction.

2. Course Outcomes/Skill Sets

CO-1	Understand the uses of various types of roofs and their construction methods and Prepare necessary drawings
CO-2	Identify the various types of flooring and methods of application as per the conditions and context.
CO-3	Classify the various types of partition walls and applications. Prepare necessary drawings
CO-4	Recognize different types of false ceiling and wall paneling. Prepare necessary drawings
CO-5	Illustrate about Pergola, formwork and scaffolding and plastering & pointing. Prepare necessary drawings

3. Course Content

Week	CO	PO	Lecture (Knowledge Criteria)	Tutorial(Activity Criteria)	Practice (Performance Criteria)
			3 hours/week	1 hour/week	4 hours/week(2 hours/batchtwice in a week)
1	1	1,2,3, 4,5,7	1.Introduction to roof 2. Technical terms used in roof 3. Different types of roofs	study about the various components used in construction of roofs	Prepare sketches on different components of roofs
2	1	1,2,3, 4,5,7	1. Types of pitched roofs-Single and double roofs(Lean-to-roof, couple roof) 2. types of pitched roofs- triple membered/trussed roof (king post and queen port roof truss)	study about the various materials used in construction on roofs	Prepare sketches on different types of pitched roofs
3	1	1,2,3, 4,5,7	1. Steel sections, steel roof trusses and its advantages 2. Roofing materials.	Collect samples of different roofing materials and steel sections	Prepare sketches on different types of steel truss and roofing materials
4	1	1,2,3, 4,5,7	1. RCC flat roof-Definition, advantages. 2. One-way slab 3.Two-way slab	Visit a constructionsite and identify different componentsof RCC roof	Prepare a plan and section showing reinforcement for one way, two way slab
5	2	1,2,3, 4,5,7	1. Flooring-Components of a floor 2.Factors to be considered while selecting the type of floor, 3.Tiled, granite and	collect samples of different flooring materials	Prepare a layout plan of laying tiles showing enlarge details

			marble flooring,		

6	2	1,2,3, 4,5,7	1. Brief study on composite and Timber flooring 2. Sunken slab	collect pictures of different types of flooring	Prepare sectional elevation of different flooring. Prepare a sectional view of sunken slab
7	3	1,3, 4,5,7	1. Partition- Definition, advantages of requirements of partition wall 2. Study of Brick partition	collect pictures of different types of partition walls	Prepare drawings on Brick partition
8	3	1,3, 4,5,7	1. study of timber partition 2. study of aluminum partition	collect pictures of different types of partition walls	Prepare drawings on timber partition and Aluminum partition
9	3	1,3, 4,5,7	1. Brief study on glass partition 2. Structural Glazing	Collect samples of different fixtures used in Partition walls	Prepare drawings on Glass partition and glazing
10	4	1,3, 4,5,7	1. Suspended ceiling: - Definition, Advantages 2. Types of suspended ceilings. 3. Materials used for false ceiling,	visit a constructionsite to see method of constructingceiling	Prepare ceiling plan and cross section of exposed ceiling using GI sections and gypsum board.

11	4	1,3, 4,5,7	1. Types of wall paneling 2. Materials used for wallpaneling 3. Construction method for wall paneling	visit the nearest constructionsite to observe construction method for wall paneling	Prepare plan, section and elevation of a wall paneling using Industrial timber/ different materials
12	4	1,3, 4,5,7	1. Retaining wall- Definition, Advantages and types 2. Construction methods ofretaining wall	Collect informationon different materials Used in construction of retaining walls	Prepare sectional elevation of retaining walls.
13	5	1,2,3, 4,5,7	Shell structures - Types of Shell structures Pergola-definition and types.	Collect informationon different types of shell structures	Prepare schematic drawings of shell structures/Pargola
14	5	1,2,3, 4,5,7	Dampness and causes, Materials used for damp proofing. Techniques & Methods of damp prevention.	Collect informationon different types of water proofing compounds	Prepare drawings on Water proofing methods for basement, concrete flat roof & sloped roof
15	5	1,2,3, 4,5,7	Definition of Formwork, Requirements & material used for formwork Definition of Scaffolding, Parts of scaffolding, types of	Collect information on materials used for Formwork and scaffolding.	Prepare sketches on Formwork and Scaffolding

			scaffolding,		
16	5	1,2,3, 4,5,7	1. Plastering- Necessity of Plastering, Types and methods of plastering. 2. Pointing- Types and methodsof pointing	Collect informationon methodsof pointing	Prepare drawing on pergola
Total in hours			48	16	64

4. Levels of CO and PO Mapping

Course	**CO's**	**PO's**							**PSO's**		
		1	2	3	4	5	6	7	1	2	3
Building construction and drawing-II	CO1	3	1	2	2	3	-	3	3	2	3
	CO2	3	1	2	2	3	-	3	3	2	3
	CO3	3	-	2	2	2	-	3	3	2	3
	CO4	3	-	3	2	1	-	3	3	2	3
	CO5	3	1	3	2	3	-	3	3	2	3
Level 3- Highly Mapped, Level 2-Moderately Mapped, Level 1-Low Mapped, Level 0- Not Mapped											

5. CIE and SEE Assessment Methodologies

Sl. No	**Assessment**	**Test Week**	**Duration In minutes**	**Max marks**	**Conversion**
1.	CIE-1 Written Test	7	80	30	Average of threetests 30
2.	CIE-2Written Test	11	80	30	
3	CIE-3Written Test	16	80	30	
4.	CIE-4 Skill Test-Practice	8	180	100	Average of two skill tests reducedto 20
5	CIE-5 Skill Test-Practice	15	180	100	
6	CIE-6 Continuous evaluation of Portfolio through rubrics.	1-16		10	10
				Total CIE Marks	60
Semester End Examination (Practice)			180	100	40
				Total Marks	**100**

6. Format for CIE written Test

Course Name	**Building construction and drawing-II**	Test	I/II/III	Sem	III/IV
Course Code	20AR41P	Duration	80 Min	Marks	30

Note: Answer any one full question from each section. Each full question carries 10 marks.

Section	Assessment Questions	Cognitive Levels	Course Outcome	Marks
I	1			
	2			
II	3			
	4			
III	5			
	6			

Note for the Course coordinator: Each question may have one, two or three subdivisions. Optional questions in each section carry the same weightage of marks, Cognitive level and course outcomes.

7. Rubrics for Assessment of Portfolios / Activity (Qualitative Assessment)

Sl. No.	**Dimension**	**Beginner**	**Intermediate**	**Good**	**Advanced**	**Expert**	**Students Score**
		2	4	6	8	10	
1	Literature survey/ Site visit	Start up with a survey which was assigned	Conducted a survey on assigned topic	Collective information on assigned topic	Site visit and survey with good collective information	Site visit and survey with a very good collective required material information gathered	8
2	Presentation skills	Does not perform any duties assigned	Performs very little duties	Performs partial duties	Performs nearly all duties	Performs all assigned duties	6
3	Documentation	Has not included relevant info	Has included few relevant info	Has included some relevant info	Has included many relevant info	Has included all relevant info needed	2
4	Conclusion and conversions	Poor	Less Effective	Partially effective	Effective	Most Effective	2
	Average Marks=(8+6+2+2)/4=4.5						**5**

Note: Dimension and Descriptor shall be defined by the respective course coordinator as per the activities

8. Reference:

Sl. No.	Description
1	Building construction by S.C.Rangwala
2	Building construction by Sushil kumar
3	Building construction by S.S. Bhavikatti
4	Building construction and drawing by W.B.Mckay
5	Building construction and drawing by M.G shah and kale
6	Building construction Illustration by Francis DK Ching
7	Building construction by S.P.Arora and S.P.Bindra

8.(a). CIE Skill Test

SL. No.	Particulars/Dimension	Marks
1	Prepare drawing of given part of construction(Plan/Section/elevation)	20
2	Prepare drawings of the given component with one enlarged detail of the same	20
3	Draw sectional view of the given construction element.	20
4	Prepare drawing of given part of construction(Plan/Section/elevation)	20
5	Write a brief note on any one component	10
6	Explain given any one component	10
	Total Marks	**100**

8.(b). SEE Scheme of Evaluation

SL. No.	Particulars/Dimension	Marks
1	Prepare drawing of given part of construction(Plan/Section/elevation)	20
2	Prepare drawings of the given component with one enlarged detail of the same	20
3	Draw sectional view of the given construction element.	20
4	Write a brief note on any one component	10
5	Sessional works	20
6	Vivo vice	10
	Total Marks	**100**

9. Equipment/software list with Specification for a batch of 20 students

Sl. No.	Particulars	Specification	Quantity
1	Drawing Tables	Standard size	20
2	LCD Projector	As per standard	01
3	Material library	As per standard	01

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ARCHITECTURALDRAWING-II

Program	**Architecture Assistantship**	**Semester**	**IV**
Course Code	**1442**	**Type of Course**	**Program Core**
Course Name	**Architectural Drawing-II**	**Contact Hours**	**8 hours/week 128 hours/semester**
Teaching Scheme	**L:T:P::3:1:4**	**Credits**	**06**
CIE Marks	**60**	**SEE Marks**	**40**

1. **Rationale**: The aim of the course is to help students to attain the need of constructionindustrywithadvanceknowledgeandskillthroughvariousteaching– learning experiences. Toper form the fundamental drawing/design skill with continuous involvement in conducting case study, measured drawing and site visits makes the students get convergent knowledge towards present industry requirement.

2. **Course Outcomes/Skill Sets: At the end of the semester student will be able to:**

CO-1	Understand the basic principles of design.
CO-2	Identify the culture and architecture of different periods of architecture like Roman, Muslim, Gothic Architecture.
CO-3	Illustrate various public building, need of data collection and conducting case study of given public building.
CO-4	Develop the ability to draw and design by using concepts of building planning, climatic parameters and building byelaws applicable to that type of public building for a given location.

3. **Course Content**

Week	**CO**	**PO**	**Lecture (Knowledge Criteria)**	**Tutorial (Activity Criteria)**	**Practice (Performance Criteria)**
			3 hours/week	1 hour/week	4 hours/week (2hours/batch twice in a week)
1	1	1,2,3	1.Basic Principles of Design – Definition of design principles. Importance of design principles. List the design principles. Contrast-	1.Collecttheinformationabout Principles of Design	1. Composition of design principles on sheet.

		4,5,7	Contrast of form, contrast of size, contrast of tone. Emphasis 2.Definition and Impotence of Balance- Symmetrical Balance, Asymmetrical balance., Rhythm, Hierarchy in design. 3.Definitionand Importance of Proportion and scale, Unity and Variety. In design.		
2	2	1,3 4,5,7	1.History of Architecture-Study of different periods of architecture. Its importance. Roman Architecture.–The main architectural features, characteristics Like :Arches ,vaults, domes 2.Roman Architecture.–The main architectural features, characteristics Of EX: Study of Colosseum/Pantheon. 3.Muslim Architecture: The main architectural features, charecteristics like: Arches, Muqarnas, Minarets, Mihrab EX: Study of Jama Masjid/Qutub Minar	1. Collect the information about Colosseum /Pantheon. 2. Collect the information about ,Gol Gumbaz/ TajMahal and Jama Masjid/ QutubMinar.	1.Prepare a sheet on Colosseum/Pantheon . showing its main architectural styles.(Sketches) 2. Prepare a sheet on Gol Gumbaz/ TajMahal and Jama Masjid/ QutubMinar. showing, its main architectural styles.(Sketches)
3	2	1,3 4,5,7	1.Muslim Architecture:The main architectural features, characteristics of EX: Study of GolGumbaz/ TajMahal 2.Gothic Architecture: Definition, The main architectural features, styles, characteristics. Large stained glass windows Pointed arches Ribbed Vaults Flying buttresses	1.Collect the information about Cathedral Notre-dame	1.Prepare a sheet on Cathedrale Notre-dame showing its main architectural styles.(Sketches)
			3.Gothic Architecture: Definition, The main architectural features, styles, characteristics of Ex: Cathedral Notre- dame		
4	3	1,2,3 4,7	1.Introductiontopublicbuildings—Definition, Features, points to be considered while designing public building.	1.Data collection Of Minor project.	1. Prepare a sheet on anthropometry and

			2. Data collection of public building.(Minor Project)Definition, need of data collection. Data collection of public buildings; 3.Case study: Case study of Minor Project. collection and analysis of photos, taking measurements of building to reproduce site plan. floorplans, elevation, sectional drawings, material specification, identifying Merits and demerits.		information collected for Minor project. 2. Prepare a case study sheets on site plan, floor plan, elevation, section of Minor project.
5	3	1,2,3 4,7	Case study: Case study of Minor Project. collection and analysis of photos, taking measurements of building to reproduce site plan. Floor plans, elevation, sectional drawings, material specification, identifying Merits and demerits.		Prepare a case study sheets on site plan, floor plan, elevation, section of Minor project.
6	3	1,2,3 4,7	1.Proposal of Minor Project—Finalizing the Requirements and Areas for project on the basis of case study and data collection. 2.Announcing the location of proposed site with measurements .and discussing The scope of site. 3.Discussing on preparation of concept sheet, Bubble diagram, Circulation drawings of proposed Minor project.	1. Collection of information about concept sheet.	1. Prepare a sheet on concept, bubble diagram of Minor project. 2. Prepare a sheet of proposed floor plan of Minor project.
7	3	1,2,3 4,7	1. Discussing and finalizing proposed floor plan. 2Discussing and finalizing proposed floor plan. 3.Discussing and finalizing Proposed Elevation and sections.	1. Collection of information about floor plans.	1. Prepare a sheet of Elevation and section of Minor project.
8	3	1,2,3 4,7	1. Discussing and finalizing proposed Elevation and sections. 2Discussing and finalizing proposed Site plan. 3. Discussing and finalizing proposed Site plan.	1. Collection of information about Elevation and sections.	1. Prepare a sheet of proposed Site plan of Minor project.
9	4	1,2,3 4,5,7	1. Data collection of public building. (Major Project) Definition, need of data collection. Data collection of public buildings;	1. Collection of information about proposed site plan.	1. Prepare a sheet on anthropometry collected for Major project.

			2. Casestudy: Case study of Major Project. collection and analysis of photos, taking measurements of Building to reproduce site plan.		2. Prepare a sheet on site plan, floor plans, elevation, section of case study of Major project.
			3. Casestudy: Casestudy of Major Project. Study and analysis of floor plans ,elevation, sectional drawings, material specification, identifying Merits and demerits.		
10	4	1,2,3 4,5,7	1. Proposal of Major Project— Finalizing the Requirements and Areas for project on the basis of case study and data collection.	1.Data collection of Major project. 2. Collection of information about case study.	1. Prepare a sheet on concept, bubble diagram of Major project.
			2.Announcing the location of proposed site with measurements and discussing The scope of site.		
			3 Discussing on preparation of concept sheet, Bubble diagram, drawings of proposed Minor project.		
11	4	1,2,3 4,5,7	Discussing and Finalizing proposed floor plans.	1.collection of information about concept sheet	1. Prepare a sheet of proposed floor plan of Major project.
			Discussing and finalizing roposed floor plans.		
			Discussing and finalizing proposed floor plans.		
12	4	1,2,3 4,5,7	Discussing and finalizing proposed floor plans.	1.collection of information about floor plans.	Prepare a sheet of proposed floor plan of Major project.
13	4	1,2,3 4,5,7	1.Discussing and finalizing proposed floor plans.	1.collection of information about floor plans.	1.Prepare a sheet of proposed Elevation and sections of Major project.
			2.Discussing and finalizing proposed Elevation and sections.		
			3.Discussing and finalizing Proposed Elevation and sections.		
14	4	1,2,3 4,5,7	1.Discussing and finalizing proposed Elevation and sections 2.Discussing and finalizing Proposed Elevation and section		
15	4	1,2,3 4,5,7	1.Discussing and finalizing proposed Elevation and sections.	1.collection of information about Elevations.	1.Prepare a sheet of proposed Site plan of Major project.
			2.Discussing and finalizing proposed Site plan.		
			3.Discussing and finalizing proposed		

			Site plan.		
16	4	1,2,3 4,5,7	1. Discussing and finalizing proposed Site plan. 2. Discussing and finalizing any one building detailing. 3. Discussing and finalizing any one building detailing.	1. Collection of information about scope of proposed site.	1. Prepare a sheet on building detailing of Major project.
Total in hours			**48**	**16**	**64**

NOTE: All above mentioned drawings are prepared by using AUTOCADD software. Print outs of Prepared drawings can be taken in A2/A3 size sheets. (Fit to the Paper)

Minor Project : Select anyone.

1. Primary Health Centre
2. Architect office
3. Cafeteria
4. Kindergarten

Major Project : **Select anyone.**

1. Primary School
2. Auditorium/Theatre
3. Restaurant/Hotel
4. Public library.
5. Apartment(G+4)
6. Small Hospital

4. Levels of CO and PO Mapping

Course	CO's	PO's							PSO's		
		1	2	3	4	5	6	7	1	2	3
Architectural Drawing-II	CO1	3	2	3	2	2	-	3	3	2	3
	CO2	2	-	1	2	1	-	1	3	1	3
	CO3	3	2	2	2	-	-	3	3	3	3
	CO4	3	3	3	3	3	-	3	3	3	3

Level 3- Highly Mapped, Level 2-Moderately Mapped, Level 1-Low Mapped, Level 0- Not Mapped

5. CIE and SEE Assessment Methodologies

Sl. No	Assessment	Test Week	Duration In minutes	Max marks	Conversion
1.	CIE-1WrittenTest	7	80	30	Average of threetests30
2.	CIE-2WrittenTest	11	80	30	
3	CIE-3WrittenTest	16	80	30	
4.	CIE-4SkillTest-Practice	8	180	100	Average of two skilltestsreducedto20
5	CIE-5SkillTest-Practice	15	180	100	
6	CIE-6 Portfolio	1-16		10	10
Total CIE Marks					60
Semester End Examination(Practice)			180	100	40
Total Marks					**100**

6. Format for CIE written Test

Course Name	Architectural Drawing-II	Test	I/II/III	Sem	IV
Course Code	20AR42P	Duration	80 Min	Marks	30
Note: Answer any one full question from each section. Each full question carries10marks.					

Section	Assessment Questions	Cognitive Levels	Course Outcome	Marks
I	1. (OR)			
	2.			
II	3. (OR)			
	4.			
III	5. (OR)			
	6.			

Note for the Course coordinator: Each question may have one, two or three subdivisions. Optional questions in each section carry the same weightage of marks, Cognitive level and course outcomes.

7. Rubrics for Assessment of Activity(Qualitative Assessment)

Sl. No.	Dimension	Beginner	Intermediate	Good	Advanced	Expert	Students Score
		2	4	6	8	10	
1	Literature survey	Start up with a Survey which was assigned	Conducted a survey on assigned topic	Collective Information on assigned topic	Site visit and survey with good collective information	Site visit and survey with a very good Collective Required Material information gathered	8
2	Presentation skills	Does not Perform Any duties assigned	Performs very little duties	Perform spatial duties	Performs nearly all duties	Performs all Assigned duties	6
3	Documentation	Has not Included relevant info	Has Included Few Relevant info	Has included some relevant info	Has included many relevant info	Has included all relevant info needed	2
4	Conclusion And conversions	Poor	Less Effective	Partially effective	Effective	Most Effective	2
	Average Marks=(8+6+2+2)/4=4.5						**5**

Note: Dimension and Descript or shall be defined by the respective course coordinator as per the activities.

8. Reference:

Sl. No.	Description
1	Building Drawing-ShahMG,TataMcGraw-Hill,1992
2	Building planning and Drawing–Kumaraswamy N, kameswra Rao A, Charotar publishing
3	Time savers standards for architectural design data by John Hancock
4	Neufert's Standards
5	Form, space and order by Francis D K Ching
5	https://www.youtube.com/watch?v=hO865EIE0p0&t=384s

8(a).CIE Skill Test Scheme of Evaluation

SL. No.	Particulars/Dimension	Marks
1	Concept Development	**05**
2	Develop a plan for a given a linesketchof2bhk residence- 30 Elevation-10marksSection-20marks	**60**
3	Develop site plan with coloring	**20**
4	Naming, dimensioning and Rendering	**15**
	Total marks	**100**

8(b).SEE Scheme of Evaluation

SL. No.	Particulars/Dimension	Marks
1	Concept Development	**05**
2	Develop a plan for a given a line sketch of 2bhk residence- 20 Elevation-10marksSection-20marks	**45**
3	Naming, dimensioning and Rendering	**20**
4	Internal assessment/Portfolio	**20**
5	Viva	**10**
	Total marks	**100**

9. Equipment/software list with Specification for a batch of 20 students

Sl. No.	Particulars	Specification	Quantity
1	Computers with Latest Configuration	As Per Standard	**20**
2.	Any latest licensed Computer Aided Drafting Software		**20**
3	Plotter of size A0		**1**
4	LCD Projector		**1**
5	UPS		**1**

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COMPUTER AIDED PRESENTATION TECHNIQUE

Programme	**Architecture Assistantship**	**Semester**	**IV**
Course Code	**1443**	**Type of Course**	**Programme Core**
Course Name	**Computer Aided Presentation Technique**	**Contact Hours**	**8 hours/week 128 hours/semester**
Teaching Scheme	**L:T:P::3:1:4**	**Credits**	**6**
CIE Marks	**60**	**SEE Marks**	**40**

1 Rationale:

Computer Aided teaching is an interactive strategy used in organizing teaching materials in a computer environment & presenting these materials to the students in a user friendly format. This course enables the students to use Computer Aided design on architectural projects, drawings and 3 dimensional modelling.

This 3d content creation tool was envisioned as a software program that would allow design professionals to draw by expressing the feel & freedom of working in a simple & elegant interface.

2 Course Out comes / Skill Sets : On successful completion of the course, the students will be able to:

CO-01	Compose architectural shapes & objects using 3d software.
CO-02	Draw different objects & components of building using various commands.
CO-03	Develop interior & exterior 3d views of buildings by applying materials etc.
CO-04	Apply & use SketchUp, rendering plugins & Photoshop to enhance visual communication throughout the design process.

3. Course Content

Week	CO	PO*	Lecture (Knowledge Criteria)	Tutorial (Activity Criteria)	Practice (Performance Criteria)
1	1,2	1,2,3 4,7	3hours / week	1hour / week	4 hours/week (2 hours / batch twice in a week)
			Introduction to 3d software's in Architecture & its installation. Introduction to Computer Aided Presentation technique using Sketchup software.	Collect information on 3d software's in Architecture & its advantages	Practice basic tools using sketchup.
2	1,2	1,2,3 4,7	Exploring the Sketchup software. Selecting a template in Sketchup. SketchUp interface: Title bar, Menubar, Getting Started with toolbars, Drawing area, Status bar & Window resize handle.	Collect information on sketch up & its advantages	Practice basic tools using sketchup.
3	1,2	1,2,3 4,7	Learning how to use SketchUp tools. Viewing the SketchUp Quick Reference Card. Creating first 3D model in SketchUp. Saving and reopening a model. Backing up a SketchUp file or restoring an Auto-save file.	Tutorial hour shall be used to practice drawings	Draw first 3D model of simple geometrical objects in SketchUp. Practice basic tools using sketchup. Saving and reopening a model. Backing up a SketchUp file.
4	1,2	1,2,3 4,7	Learn to draw Lines, circle, arc, free hand shapes, and 3d Objects. Use Pushing and Pulling Shapes in 3d. Use Dividing, Splitting, and Exploding Lines and Faces & Moving Entities Around. Stretching Geometry. Copying What You've Already Drawn. Erasing and Undoing	Tutorial hour shall be used to practice drawings	Draw simple geometrical objects like rectangle, polygons, circle etc., & extrude the same. Practice move, stretch, copy, mirror, rotate array, scale commands for the above drawn objects.
5	1,2	1,2,3 4,7	Introduction to Flipping, Mirroring, offset, Rotate and Array commands, Scaling the model or Part of model. Extruding with Follow Me. Grouping of the components.	Tutorial hour shall be used to practice drawings	Draw simple geometrical objects & Practice Flipping, Mirroring, offset, Rotate and Array, scale commands for the drawn objects.

6	1,2	1,2,3 4,7	Learn Softening, Smoothing, and Hiding Geometry.	Tutorial hour shall be used to practice drawings	Draw furnishings such as curtains, pillows, mattress & cushion sofa etc., apply softening & smoothing.
			Importance of Dimensioning. Adding Text, Labels, and Dimensions to a Model.		Draw building components such as doors, windows & staircase & dimension the drawn objects, add text to the 3d models drawn.
			Adjusting the Drawing Axes. Customizing Model's Background.		
7	1,2,3	1,2,3 4,7	Learn to view model choosing a Style. Apply Colors, Photos, Materials, and Textures.	Tutorial hour shall be used to practice drawings	Apply colors, materials & textures for building components such as doors & window floors, ceiling & walls to the drawn.
			Creating floors & ceilings, applying materials , colors & texture		
			Creating walls & applying materials , colors & texture		
8	1,2,3	1,2,3 4,7	Learn to draw basic furniture like rectangular table, three seated sofa	Tutorial hour shall be used to practice drawings	Draw furniture like rectangular table, three seated sofa, dining table with chairs, wardrobe & dressing table as per standard dimensions and apply the manipulation commands for the same.
			Learn to draw Dining table with chairs		
			Learn to draw Wardrobe, dressing table		
9	1,2,3	1,2,3 4,7	Learning to draw interior view of a living room showing sofa, media cabinet etc., and presentation of the same	Tutorial hour shall be used to practice drawings	Draw interior view of living, dining room showing sofa, media cabinet, dining table with chairs, crockery unit & apply materials for wall, floors & ceiling. Draw interior view of bedroom showing cot with mattress & wardrobe & apply materials for wall, floors & ceiling.
			Learning to draw interior view of a dining room showing dining table with chairs, Crockery unit		
			Learning to draw interior view of a bed room furniture such as cot with mattresses and wardrobe		

10	1,2,3	1,2,3 4,7	Learning to draw basic interior view of kitchen. Draw interior view of kitchen showing all the cabinets, lighting etc., Learning to draw Interior view of toilet showing all the wall elevations	Tutorial hour shall be used to practice drawings	Draw interior view of kitchen showing the detailed layout & applying materials. Draw interior view of toilet showing all wall elevations.
11	1,2,3	1,2,3 4,7	Prepare interior 3d view of a given plan of 2 bhk residence (single story) showing all components. Prepare interior 3d view of a given plan of 2 bhk residence (single story) showing all furniture. Prepare Presentation drawing for the same	Tutorial hour shall be used to practice drawings	Draw the interior views for the given plan of 2 bhk residence. Complete the above given project showing all building components & elements & do the presentation.
12	1,2,3	1,2,3 4,7	Preparation of exterior 3d view of a given plan of 2 bhk residence (Duplex) showing all components. Draw Compound wall and landscaping elements for the above exterior view Prepare presentation drawing for the drawn exterior view	Tutorial hour shall be used to practice drawings	Draw exterior 3d view of the given 2 bhk (Duplex) plan using sketchup showing all the components, mentioned in the lecture. Presenting the drawing by applying materials, texture & colors.
13	1,3,4	1,2,3 4,7	Introduction to 3d rendering such as Brighter 3D, vRay etc Study of effects studio Material editor: Transparent materials to glass Preparing photo realistic rendering using brighter 3d. Learn to work with artificial lights and Daylight settings	Tutorial hour shall be used to practice drawings	Practice rendering of above drawn interior view of living / dining / bedroom by experimenting and exploring.
14	1,3,4	1,2,3 4,7	Learn to render above prepared 3d exterior view of already drawn 2 bhk residence using Brighter 3D / vRay Learn to render above prepared 3d interior view of already drawn 2 bhk residence using	Tutorial hour shall be used to practice drawings	Practice to render prepared exterior & interior view of 2 bhk residence using Brighter 3D / vRay and plotting the drawing.

			Brighter 3D / vRay Learn to plot above prepared exterior & interior views		
15	1,3,4	1,2,3 4,7	Introduction to photoshop. Import SketchUp Models into Photoshop Using the 3D feature in Photoshop render with custom materials Learn to render any one interior view from above drawings using	Tutorial hour shall be used to practice drawings	Practice basic tools of Photoshop
16	1,3,4	1,2,3 4,7	Import SketchUp Models into Photoshop Using the 3D feature in Photoshop render with custom materials Learn to render any one exterior view from above drawings using.	Tutorial hour shall be used to practice drawings	Practice basic tools of Photoshop Import sketchup files from above prepared interior & exterior views in Photoshop, & present the same using Photoshop.
Total in hours			**48**	**16**	**64**

***PO= Program Outcome as listed and defined in year 1 curriculum and CO-PO mapping with strength(Low/Medium/High) has to be mapped by the course coordinator. (Above only suggestive).**

4. Levels of CO and PO Mapping

Course	**CO's**	**PO's**							**PSO's**		
		1	2	3	4	5	6	7	1	2	3
Computer Aided Presentation Technique	CO1	3	2	3	3	-	-	3	3	3	3
	CO2	3	1	3	3	-	-	3	3	3	3
	CO3	3	2	3	3	-	-	3	3	3	3
	CO4	3	2	3	3	-	-	3	3	3	3
Level 3- Highly Mapped, Level 2-Moderately Mapped, Level 1-Low Mapped, Level 0- Not Mapped											

5. CIE and SEE Assessment Methodologies

Sl. No.	**Assessment**	**Test Week**	**Duration** In minutes	**Max marks**	**Conversion**
1.	CIE-1 Written Test	7	80	30	Average of three tests 30
2.	CIE-2 Written Test	11	80	30	
3	CIE-3 Written Test	16	80	30	
4.	CIE-4 Skill Test-Practice	8	180	100	Average of two skill tests reduced to 20
5	CIE-5 Skill Test-Practice	15	180	100	

6	CIE-6 Continuous Evaluation of Portfolio through Rubrics	1-16		10	10
Total CIE Marks					60
Semester End Examination (Practice)			180	100	40
				Total Marks	**100**

6. Format for CIE written Test

Course Name	Computer Aided Presentation Technique	Test	I/II/III	Sem	IV
Course Code		Duration	80Min	Marks	30
Note: Answer any one full question from each section. Each full question carries 10 marks.					
Section I	Assessment Questions		Cognitive Levels	Course Outcome	Marks
	1				
	2				
II	3				
	4				
III	5				
	6				

Note for the Course coordinator: Each question may have one, two or three subdivisions. Optional questions in each section carry the same weightage of marks, Cognitive level and course outcomes.

7. Rubrics for Assessment of Portfolio / Activity (Qualitative Assessment)

Sl. No.	Dimension	Beginner	Intermediate	Good	Advanced	Expert	Students Score
		2	4	6	8	10	
1	Literature study	Has not included relevant info	Has included few relevant info	Has included some relevant info	Has included many relevant info	has included all relevant info needed	8
2	Fulfill individual roles & duties	Does not perform any duties assigned	Performs very little duties	Performs partial duties	Performs nearly all duties	Performs all assigned duties.	6
3	Communication	Poor	Less Effective	Partially effective	Effective	Most Effective	2
4	Conventions	Frequent Error	More Error	Some Error	Occasional Error	No Error	2
	Average Marks = (8+6+2+2)/4=4.5						**5**

Note: Dimension and Descriptor shall be defined by the respective course coordinator as per the activities.

8.Reference:

Sl. No.	Description
1	http://designerhacks.com/sketchup-tutorials/
2	http://www.sketchuptutorials.net/2011/10/21/sketchup-basics-tutorial-part-2-creating -your-first- building/
3	http://designstudentssavvy.com/sketchup-floor-plan-tutorial/
4	http://www.sketchupartists.org/tutorials/sketchup-and-thea-render/
5	https://www.thearender.com/site/index.php/resources/tutorials/sketchup.html
6	http://www.suplugins.com/download/SUPodiumV2PLUS Guide.pdf
7	https://youtu.be/7s F1Y9hMv8
8	https://youtu.be/MRX_VL1sKOA
9	https://youtu.be/g8auG3MQnqQ
10	https://www.skillshare.com/browse/sketchup
11	https://youtu.be/aZp3s8SdEag
12	https://youtu.be/IFiuGq-HUHw

8. (a). CIE Skill Test Scheme of Evaluation

I – CIE Skill Test-1 Scheme of Evaluation

SL. No.	Particulars / Dimension	Marks
1	**Portfolio evaluation of Practice Sessions**	10
2	Draw 3dview of given furniture / objects (Any two should be given) i. 3d view with dimensions 20 ii. Applying colors, materials & texture 20 iii. Presentation 05	45
3	Draw 3d Interior view of the given building plan i. 3d view with dimensions 20 ii. Applying colors, materials & texture 20 iii. Presentation 05	45
	Total Marks	**100**

II - CIE Skill Test-2 Scheme of Evaluation

SL. No.	Particulars / Dimension		Marks
1	**rtfolio evaluation of Practice Sessions**		10
1	Draw 3d Interior view of the given plan i. 3d view ii. Applying colors, materials & texture iii. Rendering & Presentation	 20 20 05	45
2	Draw 3d Exterior view of the given plan i. 3d view ii. Applying colors, materials & texture iii. Rendering & Presentation in photoshop	 20 20 05	45
	Total Marks		**100**

8. (b). SEE Scheme of Evaluation

SL. No.	Particulars / Dimension		Marks
1	**Portfolio evaluation of Practice Sessions**		20
2	Draw 3d Interior view of the given plan i. 3d view ii. Applying colors, materials & texture iii. Rendering & Presentation	 15 10 10	35
3	Draw 3d Exterior view of the given plan i. 3 d view ii. Applying colors, materials & texture iii. Rendering & Photoshop Presentation	 15 10 10	35
4	Viva Voce		10
	Total Marks		**100**

9. Equipment / software list with Specification for a batch of 20 students

Sl. No.	Particulars	Specification	Quantity
1	**Personal Computer**	• **Operating System: 64- bit Microsoft Windows10.** • **Memory : 8 GB (16GB recommended)** • **Graphics card :8 GB**	**20**
2	**Sketch up 2021 with Vray rendering + Adobe Photoshop CS6 software**	**Student edition**	**20**
3	**A3 size printer**		**01**

Government of Karnataka
DEPARTMENT OF COLLEGIATE AND TECHNICAL EDUCATION
JSS Polytechnic for the **Differently Abled (Autonomous)**

Building Services and Drawing

Programme	**Architecture Assistantship**	**Semester**	**IV**
Course Code	**1444**	**Type of Course**	**Programme Core**
Course Name	**Building Services and Drawing**	**Contact Hours**	**8 hours/week 128 hours/semester**
Teaching Scheme	**L:T:P :: 3:1:4**	**Credits**	**6**
CIE Marks	**60**	**SEE Marks**	**40**

1. Rationale: Building services are indispensable for buildings and its function cannot be limited to provide shelter only. But it is also responsible for the design and planning of the mechanical, electrical and public health systems required for the safe, comfortable and environmental friendly operation of modern buildings. Hence Building should be designed in such a way to provide an environment where people can feel comfortable, work, live and achieve. Basically "BUILDING SERVICES" makes a building come to life or makes the building work.

2. Course Outcomes/Skill Sets: At the end of the course students will be able to

CO-1	Know the importance of water supply and Prepare necessary drawings.
CO-2	Illustrate the need of sanitation system in building and Prepare necessary drawings.
CO-3	Understand the need of Lighting and Ventilation in Building and Prepare necessary drawings.
CO-4	Identify the necessity of Fire Protection, Acoustics and Thermal Insulation in building and Prepare necessary drawings.
CO-5	Classify the various types of Lifts, Escalator and Building Automation System and Prepare necessary drawings.

3. Course Content

Week	CO	PO	Lecture (Knowledge Criteria)	Tutorial (Activity Criteria)	Practice (Performance Criteria)
			3 hours/week	1 hour/week	4 hours/week (2 hours/ batch twice in a week)
1	1	1,2,3,5	Introduction and necessity of water supply system in buildings. Different Sources of water. Sequence of water supply treatment.	Identify different types of pipe joints around your campus and collects pictures.	Prepare a drawing of Water supply service connection and label the parts. Draw various types of pipejoints.
2	1	1,2,3,5	Various types of water demands. Types of pipes and requirements of pipe material used in water supply system in building. Various stages involved in pipe laying and joining.	Conduct a market survey to know different types of pipes, fittings and fixtures used inwater supply system. Collect the samples / brouchers.	Draw various types of pipe joints used in water supplysystem. Sketch different types of fittingsand fixtures used in pipe layout.
3	1	1,2,3,5	Methods of distribution in the water supply system. System of water supply and System of pipe layout which are generally adopted in water supply system. Appurtenances in the distribution system.	Collect information on various types of appurtenance used in water distribution system.	Prepare drawings of Gravity system, Pumping system and Dual or combination of gravityand pumping system. Sketch different System of pipelayout in water supply system.
4	2	1,2,3,5	Importance, requirements and general principles of sanitation system in building. Technical terms used in sanitary system and different types of sewers used in sanitary system in building. Various types of traps used in sanitary system in building.	Identify the layout of water supply in your campus and collect pictures.	Prepare a water supply layout for a residential building using different colour code as per standards.
5			Importance, requirements and general principles of sanitation system in building.	Identify the layout of sanitation system in your	Prepare a sanitary layout for a residential building using different colour code as per the

			Technical terms used in sanitary system and different types of sewers used in sanitary system inbuilding. Various types of traps used in sanitary system in building.	campus and collect pictures.	standards.
6			Various types of traps used in sanitary system in building.	Identify the layout of sanitation system in your campus and collect pictures.	Prepare a sanitary layout for a residential building using different colour code as per the standards.
7	2	1,2,3,5	Various types of sanitary fittings and fixtures used in building. Types of Plumbing System. 1] Single stack system. 2] One pipe system. 3] Two pipe system. Importance of rural sanitation.	Conduct a market survey to know different types of pipes, fittings and fixtures used insanitary system. Collect the samples / brouchers.	Sketch different types of sanitary fittings and fixtures. Prepare drawing of soak pit, septic tank and label the parts.
8	3	1,2,3,5	Importance of lighting in building and types of lighting. Classification of Artificial Lighting.	Observe Various types of artificial lighting provided in your campus and collect pictures.	Prepare electric layout for a residential building using symbolic representation as per IS standards.
9			Purpose and various types of Protective devices used in building.	Observe Various typesof artificial lighting provided in your campus and collect pictures.	Prepare electric layout for a residential building using symbolic representation as perIS standards.
10	3	1,2,3,5	Purpose and functional requirements of ventilation, HVAC system in building. Purpose and system of ventilation used in building.	Conduct a case study of an auditorium/ restaurant/ hospital/	Prepare flow diagram of Summer AC and Winter AC. Prepare AC duct layout.

			Types of air conditioning system.	Campus etc and identify type AC system provided, collect necessary information with photographs.	
11	4	1,2,3,5	Understand the purpose of fire protection, fire safety standards for building.	Identify the various types of fire equipments provided in your campus and collect photographs.	Prepare sheets on various types of fire extinguishing methods and make presentation.
			Causes of fire in building, classification of fire hazards, fire zoning and fire resisting materials.		
			Fire protection of structural components, fire extinguishing methods and alarm equipments.		
12	4	1,2,3,5	Definition and purpose of acoustics.	Conduct a market survey to know different types of sound absorbent materials. Collect the samples / brouchers.	Conduct a case study of an Auditorium to know more about acoustical treatment for various elements. Collect photographs.
			Sound absorbent materials and their classification.		Prepare a sheet comprising acoustical design requirements for an auditorium.
			Sound insulation methods.		
13	4	1,2,3,5	Definition and purpose of Thermal insulation.	Identify various	Prepare a sheet on various methods of thermal insulation and types of heat insulating materials.
			General principles of thermal insulation and study of heat insulating materials.	methods of thermal insulation provided in your campus and document the same.	Prepare a sheet on various methods of thermal insulation and types of heat insulating materials.
			Methods of thermal insulation for buildings.		
14	5	1,2,3,5	Definition and components of lifts.	Conduct a case study on a working elevator and document the same.	Prepare a drawing of a passenger lift to suitable scale and label the various parts.
			Application and location of lifts and escalators.		
			Safety regulations of lifts and escalators.		

15	5	1,2,3,5	Understand the various types of lifts Definition, purpose and working principles of an escalator. Components of an escalator and service requirement of the same.	Conduct a case study on a working escalator and document the same.	Prepare a drawing of escalator and label various parts.
16	5	1,2,3, 5	Definition and purpose of Building Automation system. Different types of building automation equipments and their requirements. Advantages of building automation system.	Study the various typesof building automation.	Prepare a sheet on Buildingautomation system.
Total in hours			**48**	**16**	**64**

4. Levels of CO and Po Mapping

Course	**CO's**	**PO's**							**PSO's**		
		1	2	3	4	5	6	7	1	2	3
Building Services and Drawing	CO1	3	1	1	-	3	-	2	3	1	2
	CO2	3	2	2	-	3	-	2	3	1	2
	CO3	3	2	2	-	3	-	2	3	1	2
	CO4	3	2	2	-	3	-	2	3	1	2
	CO5	3	2	1	-	3	-	2	3	1	2
Level 3- Highly Mapped, Level 2-Moderately Mapped, Level 1-Low Mapped, Level 0- Not Mapped											

5. CIE and SEE Assessment Methodologies

Sl. No	**Assessment**	**Test Week**	**Duration** In minutes	**Max marks**	**Conversion**
1.	CIE-1 Written Test	7	80	30	Average of three tests 30
2.	CIE-2Written Test	11	80	30	
3	CIE-3Written Test	16	80	30	
4.	CIE-4 Skill Test-Practice	8	180	100	Average of two skill tests reduced to 20
5	CIE-5 Skill Test-Practice	15	180	100	
6	CIE-6 Portfolio continuous evaluation of Activity through Rubrics	1-16		10	10
				Total CIE Marks	60
	Semester End Examination(Practice)		180	100	40
				Total Marks	**100**

6. Format for CIE written Test

Course Name	**Building Services and Drawing**	Test	I/II/III	Sem	IV
Course Code	**1444**	Duration	80Min	Marks	30

Note: Answer any one full question from each section. Each full question carries10 marks.

Section	Assessment Questions	Cognitive Levels	Course Outcome	Marks
I	1. (OR)			
	2.			
II	3. (OR)			
	4.			
III	5. (OR)			
	6.			

Note for the Course coordinator: Each question may have one, two or three sub divisions. Optionalquestions in each section carry the same weightage of marks, Cognitive level and course outcomes.

7. Rubrics for Assessment of Activity (Qualitative Assessment/Suggestive only)

Sl. No.	**Dimension**	**Beginner**	**Intermediate**	**Good**	**Advanced**	**Expert**	**Students Score**
		2	4	6	8	10	
1	Literature survey / case study / Site Visit	Start up with a Literature survey / case study / Site Visit which was assigned	Conducted a survey on assigned topic	Collective information on assigned topic	Site visit and survey with good collective informatio n	Site visit and survey with a very good collective required material information gathered	8
2	Presentation skills	Does not perform any duties assigned	Performs very little duties	Performs partial duties	Performs nearly all duties	Performs all assigned duties	6
3	Documentatio n	Has not included relevant info	Has included few relevant info	Has included some relevant info	Has included many relevant info	Has included all relevant info needed	2
4	Conclusion and conversions	Poor	Less Effective	Partially effectiv e	Effective	Most Effective	2
	Average Marks=(8+6+2+2)/4=4.5						**5**

Note: Dimension and Descriptor shall be defined by the respective course coordinator as per the activities

8. Reference:

Sl.No.	Description
1	Water supply and sanitary Engineering - G S Birdie
2	Building Construction - B C Punmia
3	Building Construction - Ahuja and Birdie
4	Basic Electrical Engineering - Anwari
5	Electrical Technology - H. Cotton
6	Air conditioning and Refrigeration - Don Kundwar
7	Air conditioning and Refrigeration Data book - Manohar Prasad
8	Environmental engineering - V. Thanikachalam
9	Fire and Human Behaviors - David Gunter
10	Fire safety in building Thomas Adam and Charles Black
11	National building Code

8(a). CIE Skill Test Scheme of Evaluation (Suggestive only)

SL. No.	Particulars/Dimension	Marks
1	Sketch any five types of sanitary fixtures.	**10**
2	a) Prepare a Sanitary layout for a residential building using different color code as per standards. -30 marks b) Explain septic tank with the help of sketch and label the parts. -10 marks c) Sketch and explain the working principles of an escalator. -10 marks d) Draw a passenger lift and label the various parts. -10 marks	**60**
3	Explain various methods of thermal insulation for building.	**15**
4	Briefly explain the different types of building automation equipments and their requirements.	**15**
	Total marks	**100**

8(b). SEE Scheme of Evaluation (Suggestive only)

SL. No.	Particulars/Dimension	Marks
1	Sketch different types of Trap's, label the parts.	**10**
2	a. Prepare a water supply layout for a residential building using different color code as per standards. -30 marks b. Explain septic tank with the help of sketch and label the parts. -10 marks c. Draw an AC Plant diagram for Summer AC and Winter AC. -10 marks d. Draw a passenger lift and label the various parts. -10 marks	**60**
3	Internal assessment / Portfolio	**20**
4	Viva	**10**
	Total marks	**100**

9. Equipment/software list with Specification for a batch of 20 students

Sl. No.	Particulars	Specification	Quantity
1	Computers	As Per Standard	20
2	LCD Projector		01
3	Material library		01
4	UPS		01

Government of Karnataka
Department of Collegiate and Technical Education
JSS Polytechnic for the Differently Abled (Autonomous)

INDIAN CONSTITUTION

Programme	**Audit Course**	**Semester**	**IV**
Course Code	**1445**	**Type of Course**	**Audit**
Course Name	**Indian Constitution**	**Contact Hours**	**2 hours/week 32 hours/semester**
Teaching Scheme	**L:T:P :: 2:0:0**	**Credits**	**2**
CIE Marks	**50**	**SEE Marks**	**Nil**

1. Course Outcomes: At the end of the Course, the student will be able to:

CO1	Understand Preamble, salient features and importance of Indian Constitution.
CO2	Understand Fundamental rights, duties and Directive principles of state policy.
CO3	Understand Parliamentary system of governance, Structure, Functions, Power of Central, state governments (Legislative, Executive) and Judiciary.
CO4	Understand Panchayat Raj Institutions and Local self-governments, UPSC, KPSC, NHRC, Status of women, RTE etc.

2. Course Content

Week	CO	Detailed Course Content	Contact Hours
1	1	Introduction to constitution of India-Formation and Composition of the Constituent Assembly-Salient features of the Constitution-Preamble to theIndian Constitution	2
2	1,2	Fundamental Rights- Definition, The right to equality, The right to freedom,The right against exploitation, The right to freedom of religion.	2
3	1,2	Cultural and educational rights and The right to constitutional remedies. Fundamental Duties, Directive principles of state policy.	2
4	1,3	Parliamentary system of governance- Structure of Parliament- Lok Sabha andRajya Sabha.	2
5	1,3	Functions of parliament- Legislative, Executive, Financial Function Powers of Lok Sabha and Rajya Sabha.	2
6	1,3	Procedure followed in parliament in making law, Annual financial statement (Budget) – procedure in parliament with respect to estimates, Appropriation bill, Supplementary, additional grants, Vote on account, votes on credit and exception grant, special provisions, rules of procedure.	2
7	1,3	Structure of union executive, Power and position of President. Vice President, Prime minister and council of ministers.	2
8	1,3	Structure of the judiciary: Jurisdiction and functions of Supreme Court, high court, and subordinate courts.	2
9	1,3	Federalism in the Indian constitution- Division of Powers: Union list, State list and concurrent list.	2

		Structure of state legislation, Legislative assembly and Legislative council.	
10	1,3	Functions of state legislature, Structure of state executive-Powers and positions of Governor, Speaker, Deputy Speaker, Chief Minister and council ofminister.	2
11	4	Local self-government- meaning-Three tier system, Village Panchayat-Taluk panchayat Zilla panchayat, Local bodies-Municipalities and Corporations, Bruhath Mahanagara Palike, Functions of Election commission, UPSC, KPSC.	2
12	4	Amendment of the constitution, Human Rights-Definition-constitutional provisions-right to life and liberty-Human Rights of Women-Discriminationagainst women.	2
13	4	Steps that are to be taken to eliminate discrimination against women in Education, employment, health care, Economic and social life,	2
14	4	Status of Women in India - Women in rural areas, Constitutional Safeguards - Dowry Prohibition act 1961- Domestic violence act 2005- Sexual harassmentat work place bill 2006.	2
15	4	Human Rights of Children- Who is a child- list the Rights of the Child- Right to education, Protection of Children from Sexual Offences Act (POCSO)-2012	2
16	1,4	National Human Rights Commission Constitution- Powers and function of the Commission-Employee rights- Provisions made, Contractual-Non contractual employee rights-Whistle blowing-definition-Aspects-Intellectual Property Rights (IPR)–Meaning-Need for protection- Briefly description of concept of patents, Copy right, Trademark	2
		Total in Hours	**32 Hrs**

3. References

1. Introduction to the Constitution of India- Dr. Durga Das Basu
2. Empowerment of rural women in India-Hemalatha H.M and Rameshwari Varma, Hema Prakashana.

4. CIE and SEE Assessment Methodologies

Sl. No	Assessment	Test Week	Duration In minutes	Max marks	Conversion
1.	CIE-1 Written Test	7	80	30	Average of three tests **30**
2.	CIE-2 Written Test	11	80	30	
3	CIE-3 Written Test	16	80	30	
4.	CIE-4 MCQ	8	60	20	Average of two CIE **20**
5	CIE-5 Open Book Test	15	60	20	
Total CIE Marks					**50**
Semester End Examination (Practice)			-	-	-
Total Marks					**50**